



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,353	09/12/2000	John A. Arbuckle	0457-PCT-US	4766

7590

04/08/2003

David B Ran  
7100 N W 62nd Avenue  
Darwin Building  
Johnston, IA 50131

EXAMINER

TUNG, JOYCE

ART UNIT

PAPER NUMBER

1637

DATE MAILED: 04/08/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**Application No.  
**09/622,353**Applicant(s)  
**Arbuckle et al.**Examiner  
**Joyce Tung**Art Unit  
**1637**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED Mar 12, 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

THE PERIOD FOR REPLY [check only a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on Mar 12, 2003. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see NOTE below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE:

3. ☐ Applicant's reply has overcome the following rejection(s):

4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
Please see the attached.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-21

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other:

Art Unit: 1637

1. The response filed 3/12/2003 has been fully considered but they are not persuasive as discussed as follows.
2. Claims 1-21 are pending.
3. Claims 1, 4-7, 9-13 and 15-21 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Briggs et al. (5,962,764) in view of Lindemann et al. (5,958,738).

The response argues that the claimed invention is to identify an unidentified genetic sequence that is associated with a known phenotypes, while Briggs et al. disclose use of a known sequence to identify the phenotype associated with that known sequence.

The response further argues that Briggs et al. provided novel means to enable reverse genetics by working from a known DNA sequence toward the identification of a mutant DNA sequence and finally to the functional characterization of the gene's (mutant) phenotype, while the present invention is for forward genetics: to segregate plants based on a known mutant phenotype and then apply transposon-anchored PCR to identify and isolate the genetic sequence (mutant).

The response also argues that the teachings of Lindemann et al. relies on primers directed to adapter only and do not contemplate their use in combination with primers anchored genetic sequence.

However, the teachings of Briggs et al. read on the limitation of claim 1 because the limitation of claim 1 does not limit to identify unknown genetic sequence. Thus the limitation of claim 1 is read on identifying known genetic sequence associated with that known sequence.

Art Unit: 1637

In addition the claimed invention also uses a primer which is directed to an adapter (See step (e) of claim 1) and the another primer hybridizes to the transposable element in the fragments. Thus, the claimed invention uses the primer which has genetic sequence (the transposable element). Based upon the discussion above, the rejection is maintained.

4. Claims 2-3, 8 and 14 remain rejected under 35 U.S.C. 103(a) over Briggs et al. and Lindemann et al., further in view of Schanble et al. and Halverson et al.

Since claims 2-3, 8 and 14 depend from claim 1 which is not allowable over the prior art as discussed in section 3 above. the rejection of claims 2-3, 8 and 14 is maintained.

5. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

6.. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1637 via the PTO Fax Center located in Crystal

Application/Control Number: 09/622,353

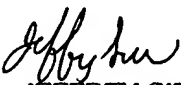
Page 4

Art Unit: 1637

Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

J.T.  
April 1, 2003

  
**JEFFREY SIEW**  
**PRIMARY EXAMINER**

4/6/03